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EXAMINER

SHAND, ROBERTA A

ART UNIT PAPER NUMBER

2616

DATE MAILED: 05/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/891,103

Applicant(s)

EYUBOGLU ET AL.

Examiner

Roberta A. Shand

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8,10-27,35-48 and 50-128 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8,10-27,35-48 and 50-128 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 8, 10-27 and 35-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hokkanen (WO 98/08353) in view of Davidson (US 6408182 B1).
3. Regarding claims 35, 36, 42, 48, 53 and 57-59, Hokkanen teaches (fig. 2) a method comprising: enabling communication among radio network controllers (BSC1, BSC2) and radio nodes (BTS2, BTS4); establishing a first traffic channel between a first access terminal and a first RNC (BSC1) of the network through a first radio node (BST2) when the first access terminal is in the coverage area of the first radio node (BST2); establishing a second traffic channel between a second access terminal and a second RNC (BSC2) of the network through a second radio node (BST4) when the second access terminal is in the coverage area of the second radio node (BST4); and maintaining the first traffic channel between the first access terminal and the first radio network controller (BSC1) without requiring the first traffic channel to pass through another radio network controller when access terminal moves from a coverage area of the first radio node to a coverage area of the second radio node.
4. Hokkanen does not teach many-to-many communications and a packet network.

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5. Davidson teaches (fig. 2) many-to-many communications and a packet network (IP network). It would have been obvious to one of ordinary skill in the art to adapt to Hokkanen's system Davidson's concept of packet routing and many-to-many to enhance the scope of the system ensuring back-up incase of equipment failure.

6. Regarding claims 8, 10-12 and 66, Davidson teaches (col. 3, lines 3-34) the first RNC (MSC) comprises and default controller for the first RN (BSC) comprising by the first RN (BSC) data packets received fro a third access terminal that does not have an existing session to the first RNC (MSC), the radio node receiving a paging request (fig. 3A), forward and reverse link traffic channel packets, from more than one RNC (MSC), RNC requests resources from radio node before adding sectors to a traffic channel.

7. Regarding claims 13-18 Hokkanen teaches (figs. 1 and 2) the RNCs reside in different locations and are connected via a metropolitan area network, the first session is transferred from one RNC in one subnetwork to another in another subnetwork based upon a predetermined criterion, the transfer is triggered by a change detected (fig. 8), and mobility manager to maintain position of the access terminal maintain.

8. Regarding claims 19- 27, Hokkanen teaches (figs.8 and 9) assigning sessions to the RNCs, determining an association between the RN's and RNCs, load balancing, RNC and RN communicate resource information to each other to enable network nodes to make session assignment decisions on their own, and IP (fig. 3).

9. Regarding claims 37-39 and 54, Hokkanen teaches (fig. 4) sending an access channel message from the first mobile access terminal to the first RNC via the second RN and RNC, signaling between the first and second RNC when establishing a traffic channel between the first RNC and the first mobile access terminal, determining an IP address of the RNC using a session identifier (col. 6, lines 28-40).

10. Regarding claims 40-41 and 56, Hokkanen teaches (col. 4, line 34 – col. 5, line 5) the IP address is determined using the session identifier.

11. Regarding claims 43-46, Hokkanen teaches (figs. 8 and 9) selecting the RNC in the first RN based on loading of the second RNC, based on routing distance.

12. Regarding claims 47 and 55, as for ix EV DO UAT, It would have been obvious to one of ordinary skill in the art to adapt this to Hokkanen and Davidson's system as 1x Evolution Data Only is well known in the art.

13. Regarding claim 50, Hokkanen teaches (fig. 2) a system comprising: RNs (BTS2, BTS4) configured to receive and transmit data to and from access terminals located in the coverage area; RNCs (BSC1, BSC2) configured to receive and transmit data to and from the access terminals through the RNs (BTS2, BTS4); a first traffic channel between a first access terminal and a first RNC (BSC1) of the network through a first radio node (BST2) when the first access

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terminal is in the coverage area of the first radio node (BST2); a second traffic channel between a second access terminal and a second RNC (BSC2) of the network through a second radio node (BST4) when the second access terminal is in the coverage area of the second radio node (BST4); and the first traffic channel is maintained between the first access terminal and the first radio network controller (BSC1) without requiring the first traffic channel to pass through another radio network controller when access terminal moves from a coverage area of the first radio node to a coverage area of the second radio node.

14. Hokkanen does not teach many-to-many communications and a packet network.

15. Davidson teaches (fig. 2) many-to-many communications and a packet network (IP network). It would have been obvious to one of ordinary skill in the art to adapt to Hokkanen's system Davidson's concept of packet routing and many-to-many to enhance the scope of the system ensuring back-up incase of equipment failure.

16. Regarding claim 51 Davidson teaches (fig. 2) an IP network (51).

17. Regarding claim 52, Hokkanen teaches (fig. 4) each RNC and RN are associated with a single network.

18. Regarding claims 60-65 Davidson teaches (figs. 2) a many-to-many network which encompasses all of the limitations of claims 60-65, because one network connects all of the RNs (BSCs) and RNCs (MSCs) there fore when a mobile roams it's data is sent from an RNC through the IP network directly to the appropriate RN without going through any other RNCs or RNs.

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19. Claims 77, 90, 108, 115, 119, 126 and 127 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davidson (US 6834050 B1).

20. Regarding claims 77, 90, 108, 115, 119, 126 and 127, as for ix EV DO UAT, It would have been obvious to one of ordinary skill in the art to adapt this to Davidson's system as 1x Evolution Data Only is well known in the art

Claim Rejections - 35 USC § 102

21. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

22. Claims 67-76, 78-89, 91-107, 109-114, 116-118, 120-125 and 128, rejected under 35 U.S.C. 102(e) as being anticipated by Davidson.

23. Regarding claims 67-72, 74-76, 78, 79, 80-85, 87-89 and 91-98, Davidson teaches (fig. 2) a method comprising: simultaneously enabling a radio node (BSC) to serve both a first dormant access terminal (mobile) and a second dormant access terminal (mobile), the first access terminal having a session with a first RNC (MSC) and a second access terminal having a session with a

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second RNC (MSC), the RN (BSC) being interconnected with the RNCs (MSCs) using a packet network (IP) (col. 5, line 14 – col. 6, line 2).

24. Regarding claims 73, 86, 105, 116 and 122, Davidson teaches (col. 3, lines 3-34) storing in the RN (BSC) information to map a identifier of the first access terminal (mobile) IP address of the first RNC (MSC); use the stored information to determine the IP address of the RNC (MSC) using a session identifier included in an access terminal message received from the access terminal (mobile).

25. Regarding claims 99-104, 106, 107, 109-114, 117, 118, 120, 121, 123-125 and 128, Davidson teaches (fig. 2) a method comprising: at a RN (BSC) in communication with a first RNC (MSC) and a second RNC (MSC) through a packet network (51) that enables many-to-many communication; routing access channel packets received from an access terminal (mobile, not shown) to a selected one of either the first or second RNC (MSC) by determining an IP address of a serving RNC (col. 3, lines 3-34).

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Conclusion

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberta A Shand whose telephone number is 571-272-3161. The examiner can normally be reached on M-F 9:00am-5:30pm.

27. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

28. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Roberta A Shand
Examiner
Art Unit 2616



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